

Project under Climate Change Action Programme (CCAP) of MoEFCC, GoI

Project Name/Title: Enhancing Adaptive Capacity to Climate Change through Conservation of Traditional Water Supply Sources (Wells & Bawdies) of Burhanpur City

Name of the Implementing Institution	<p>Additional Information on the contact detail,:</p> <p>Madhya Pradesh State Knowledge Management Centre on Climate Change (MP SKMCCC), EPCO, Department of Environment, GoMP Paryavaran Parisar, E-5, Arera Colony Bhopal-462016, (MP) India Telephone : +91 755 2466859 Email: epcocco@gmail.com</p> <p>Project in-charge</p> <p>Mr. Lokendra Thakkar Coordinator, MP SKMCCC Telephone : +91 755 2460255 Email: thakkarlokendra@mp.gov.in</p> <p>Start and close date:</p> <p>2 years, Mar 2019 – Feb 2021</p> <p>Website:</p> <p>http://www.climatechange.mp.gov.in</p>
Details of Project	<ul style="list-style-type: none">● Project partners-<ol style="list-style-type: none">1. MP SKMCCC, Department of Environment, GoMP, Bhopal.2. Burhanpur Municipal Corporation, Burhanpur3. Divisional Forest Office (General), Burhanpur● Project Cost-<p>Rs. 5.00 crores</p>● Project objectives-<ul style="list-style-type: none">– Enhance resilience of Burhanpur city against climate change impacts by conserving traditional water supply sources (Kundi Bhandara Network, Wells & Bawdies)– Augmenting groundwater levels through rainwater harvesting and catchment area treatment– Community participation for effective management of water resources● Project baseline-<ul style="list-style-type: none">– UNESCO recognized Heritage City network known for "Qanats", a unique 400 years old traditional water harvesting system, consists of underground channels that convey water from aquifers in highlands to the surface at lower levels

	<ul style="list-style-type: none"> – Offers a practical, low cost solution to provide sustainable water – Oldest system of human engineering to address water stress – One of the best climate adaptation and resilience practice for groundwater management for regions facing water scarcity – 10-15% of water is still from kundi Bhandara in Burhanpur <p>● Project expected outputs/deliverables-</p> <p>Project has identified 71 traditional water bodies in Burhanpur and suggests necessary interventions for their revival and restoration, thus, helping in building resilience of the water sector in Indore with respect to climate change.</p>												
<p>Project Relevance</p>	<p>Indian cities are experiencing rapid urbanisation and peri-urban growth, In the last decade, MP has registered a high urban growth as compared to its rural population. The impacts of water scarcity are felt particularly in the city areas with high population density, poor settlements that have limited or no access to piped water supplies and peri-urban areas where the supply network is yet to be extended. Hence, there is an urgent need to conserve the local traditional water systems and improve water use efficiency.</p>												
<p>Project work plan</p>	<p>The methodology of the project included following:-</p> <ol style="list-style-type: none"> 1) Survey and investigation of traditional water sources 2) Physical Restoration of traditional water supply sources <ol style="list-style-type: none"> a. Restoring 71 traditional wells and bawdies b. Physical restoration of Kundi Bhandara Network c. Rain water harvesting in 250 Govt. Buildings 3) Kundi Bhandara catchment area treatment including activities such as plantation, grassland development, soil moisture conservation etc. 4) Facilitate community engagements for effective management of traditional water conservation system 												
<p>Project Implementation results</p>	<p>Development of DPR may help in evolving following strategies:-</p> <ol style="list-style-type: none"> 1) Appropriate GIS data base of existing water bodies along with its status. 2) Assess the effect of level and quality of water in various seasonal variations. 3) Promoting water storage at all levels, creating reliability and security of clean water. 4) Evolving framework for sustainable water management policies. 												
<p>Project benefits</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Component Activities</th> <th style="width: 20%;">Social</th> <th style="width: 20%;">Economical</th> <th style="width: 30%;">Environmental</th> </tr> </thead> <tbody> <tr> <td>Physical restoration of traditional water sources</td> <td>Increased water availability</td> <td>Cost savings of Rs. 17.3 lakh per annum</td> <td>Increased water availability and groundwater recharge</td> </tr> <tr> <td>Kundi Bhandara catchment area treatment</td> <td>Local JFMCs / SHGs will benefit from the eco restoration activities</td> <td>Increase in forest produce</td> <td>Increased groundwater recharge, increase in carbon</td> </tr> </tbody> </table>	Component Activities	Social	Economical	Environmental	Physical restoration of traditional water sources	Increased water availability	Cost savings of Rs. 17.3 lakh per annum	Increased water availability and groundwater recharge	Kundi Bhandara catchment area treatment	Local JFMCs / SHGs will benefit from the eco restoration activities	Increase in forest produce	Increased groundwater recharge, increase in carbon
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				sequestration, vegetation growth, increased soil moisture
	Community engagements and partnerships	Building community ownership of water sources to maintain and manage water bodies	Benefits associated with reduced water scarcity	Conservation of water sources
Project long term climate benefits	Diversify water supply and promote water storage at all levels, also increasing the awareness among different socio-economic groups about the surface and groundwater uses and conservations.			
Project Sustainability	Climate change has both direct and indirect impact on urban/rural water sectors. Enhancing climate resilience will aid in improving governance in the water sector, thereby creating water systems that are sustainable and equitable to meet the present and future water needs.			

